

# **INDUSTRIAL COMMITTEE OF AMMUNITION PRODUCERS (ICAP) YEAR 2001 REPORT**

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# Industrial Committee Of Ammunition Producers (ICAP)

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- Objective: Forum to discuss issues, policies, procedures, and initiatives in ammunition (since 1980)
- ICAP serves the CG of the OSC
- Ammunition industry segments represented, NDIA, and MIBTF
- Army representation includes Triad leaders, CG ARDEC, and DCS-AMMO

# Major Issues Addressed in 2001 by ICAP

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- Delinquent product deliveries
- Top 20 ammunition issues
- Ammunition industry – critical materials supply
- CP<sup>2</sup> program – purpose, status, benefits
- Ammunition readiness

# Delinquent Product Deliveries

## Root Cause Analysis And Corrective Action

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- AMC policy: Any contract more than 90 days delinquent should be considered for termination
- Quarterly metrics by command on delinquencies
- FY99 year end total - \$742 million
- FY00 year end total - \$428 million (28% of WIP)

# Delinquent Product Deliveries

## Root Cause Analysis And Corrective Action

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- Root cause analysis (major factors)
  - ✓ Acquisition related delays (34%)
  - ✓ Production related delays (29%)
  - ✓ Engineering related delays (13%)
- Delinquencies by commodity
  - ✓ Medium caliber ammo (24%)
  - ✓ Bombs (15%)
  - ✓ Pyrotechnics (14%)
  - ✓ Artillery ammo (13%)
  - ✓ Tank ammo (8%)

# Delinquent Product Deliveries

## Root Cause Analysis And Corrective Action

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- Army/industry teams working issues
- Mitigating actions underway
  - ✓ Long term contracts
  - ✓ Critical defect prevention
  - ✓ Program risk assessment
  - ✓ Program reviews – communication & focus
  - ✓ Process management
  - ✓ Automated systems initiatives
  - ✓ Quality assurance foundation
- FY01 year end total delinquencies - \$349 million (22% of WIP)

# Top 20 Ammunition Issues – Focus On Operational Issues

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- Initiated by MG McManus in 2001
- Relates production, base and stockpile issues to field needs
- Candidates nominated by OSC commodity teams
  - ✓ Training or readiness impact
  - ✓ Congressional interest
  - ✓ High dollar value/visibility

# Top 20 Ammunition Issues – Focus On Operational Issues

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- Typical top 20 ammunition issues
  - ✓ Training requirement increase
  - ✓ Funding shortfalls
  - ✓ Technical/production issues
  - ✓ Limited production base
  - ✓ Age of ammunition stockpile



# Top 20 Ammunition Issues – Focus On Operational Issues

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- Future actions
  - ✓ Share issues with ICAP/industry
  - ✓ Work issues through IPT/PMR structures
  - ✓ Incorporate many of the same product delinquency mitigating actions
  - ✓ Involve ICAP/industry in fixes wherever feasible

# Ammunition Industry Critical Materials Supply

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- Issue: As a result of industry rationalization, sources of supply for critical ammunition components are extremely limited creating program risk
- Major programs dependent on single sources of supply for critical items. Some sources are small and potentially unstable.

# Ammunition Industry Critical Materials Supply

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- Problem highlighted by cotton linters supply issue
  - key component of nitrocellulose needed for combustible case and propellant
- ICAP/Army teams completed an initial pass at identifying problem areas

# Ammunition Industry Critical Materials Supply

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- Potential supply program areas
  - ✓ Small & medium caliber link supply
  - ✓ Medium caliber cartridge case supply
  - ✓ Cloth propellant bags (fabric finish)
  - ✓ Tracer pellets – one U.S. source
  - ✓ Primer chemicals – gums, nitrates, etc.
  - ✓ Tungsten – 76% produced by China
  - ✓ Composition A-4 – one U.S. source
  - ✓ Insulation materials
  - ✓ Resins

# Ammunition Industry Critical Materials Supply

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- Ongoing action: Army/industry IPT's and program teams to identify further risk areas, plan for and qualify alternate sources

# Contractor Performance Certification Program (CP<sup>2</sup>) – Purpose, Status And Benefits

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- Issue: Given the worldwide move to ISO certification, should CP<sup>2</sup> continue and is it needed?
- CP<sup>2</sup> program purpose
  - ✓ Work with suppliers to improve quality
  - ✓ Recognize suppliers who improve
  - ✓ Leverage knowledge in award decision process

# Contractor Performance Certification Program (CP<sup>2</sup>) – Purpose, Status And Benefits

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- CP<sup>2</sup> program status
  - ✓ CP<sup>2</sup> is an ISO 9001 plus system
  - ✓ Participation totally voluntary
  - ✓ CP<sup>2</sup> is the only internal Army vehicle for contractor base quality assessment
  - ✓ Typical program results – lower scrap, improved yields, reduced cycle time

# Contractor Performance Certification Program (CP<sup>2</sup>) – Purpose, Status And Benefits

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- CP<sup>2</sup> program benefits
  - ✓ Continuous quality system improvement
  - ✓ Improved performance & productivity
  - ✓ Customer satisfaction/customer partnering
  - ✓ May qualify contractor for DCMA benefits
    - decreased audits
    - contractor self oversight
    - reduced notification requirements
- AMC supports the CP<sup>2</sup> program – exploring avenues for increased benefits to certified suppliers



# Contractor Performance Certification Program (CP<sup>2</sup>) – Purpose, Status And Benefits

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- OSC committed to partnering with supplier base through CP<sup>2</sup> as long as OSC and industry recognize a mutual need
- ICAP to support continuance of CP<sup>2</sup> and will work to improve benefits to industry and the Army

# Ammunition Readiness – Operational Reality

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- Ammunition readiness facts – stockpile issues, production base issues, and policy issues
- Stockpile issues
  - ✓ Unserviceable items
  - ✓ Shortfall of go-to-war munitions
  - ✓ Uneven asset distribution
  - ✓ Demil stocks at 467K tons and growing

# Ammunition Readiness – Operational Reality

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- Production base issues
  - ✓ Capacity down 68% last 10 years
  - ✓ Single sources for 25% of critical components
  - ✓ Surge capability virtually non-existent
  - ✓ No North American source for certain critical components

# Ammunition Readiness – Operational Reality

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- Policy issues
  - ✓ Policies shaped by affordability
  - ✓ Risk management driven by budget considerations
  - ✓ Limited modernization – little RDT&E for legacy systems munitions

# Ammunition Readiness – Operational Reality

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- Conclusion: Operational warfighting capability must shape ammunition management strategy
  - ✓ Requirements reviews must include CINC's
  - ✓ Modernization essential
  - ✓ Increased training pipeline necessary
  - ✓ Demil backlog must be addressed
  - ✓ Need balanced organic and commercial production base

# Ammunition Readiness – Operational Reality

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- ICAP, NDIA, and MIBTF must focus corporate, organizational and political power on assisting the Army in ammunition readiness improvement
- Future ICAP activities must address these issues and dedicate resources to corrective action implementation

# Anticipated 2002 ICAP Initiatives And Focus

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- Delinquent product deliveries – continue improvement
- Critical materials supply – risk mitigation
- CP<sup>2</sup> program improvement in benefits
- Ammunition readiness – industry assistance
- Industry participation in Army IPT's
- Industry participation in Army planning

# Industry Sectors

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- Demilitarization
  - William S. Roman  
PB/Nammo Demil, LLC (212-465-5023)
- Fuzes
  - Eric L. Guerrazzi  
KDI Precision Products, Inc. (513-943-2080)
- GOCO's
  - BG William R. Holmes, (USA Ret)  
Day Zimmermann M&H (215-299-1567)



# Industry Sectors

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- Large Caliber
  - James J. Flaherty  
Chamberlain Mfg. Corp. (570-340-1105)
- Medium Caliber
  - Mike McCann  
Alliant Techsystems

# Industry Sectors

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- Propellants and Explosives
  - David Allott  
BAE Systems (Holston)
- Pyrotechnics
  - John Broderick  
Kilgore

# Industry Sectors

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- Systems
  - David Martin  
Raytheon Missile Systems
- Warheads and Rockets
  - Linda P. Hudson  
GDAS (802-657-6201)

# ICAP Web Page

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